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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,093

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EXAMINER

COMSTOCK, NATHAN

ART UNIT

PAPER NUMBER

4132

NOTIFICATION DATE

DELIVERY MODE

05/19/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/564,093	Applicant(s) HAYASHI ET AL.	
	Examiner NATHAN E. COMSTOCK	Art Unit 4132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 8-27 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.
2. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

3. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 8-17, drawn to an antireflection molded article.

Group II, claim(s) 18-27, drawn to a process for producing an antireflection molded article.

4. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Groups I and II share the common and/or corresponding technical features of an anti-reflection molded article which comprises a thermoplastic resin and has an antireflection face comprising defined protrusions and/or depressions, an average of heights of the protrusions or an average depths of the depressions is 50 to 600 nm, and an average of the shortest distances between vertices of adjacent protrusions or between lowest portions of adjacent depressions is 50 to 400 nm, wherein the inclined faces of the protrusions or the depressions has an arithmetic average roughness (Ra) of 100 nm or less.

5. However, in order to be considered a common special technical feature, any such feature must be novel and non-obvious. The above described technical features are not novel and non-obvious. Japanese Patent Abstract of Japanese Pat. Pub. No. 2003-043203 (hereinafter "JP 2003-043203") discloses an anti-reflection molded article (antireflection film, abstract, line 5) which comprises a thermoplastic resin (light transmitting plastic resin, abstract, line 12), and has

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an antireflection face (stamped face of film, abstract, lines 10-14) comprising defined protrusions and/or depressions (formed by transferring the surface pattern of the stamper, abstract, lines 10-14, the surface pattern having protrusions and depressions which would form depressions and protrusions, respectively, on the stamped face of the film, abstract, lines 14-17), an average of heights of the protrusions or an average depths of the depressions is 50 to 600 nm (stamper has projections and depressions having depths between 100 and 700 nm, which would cause projections and depressions on stamped face of film of similar size, abstract, lines 10-17), and an average of the shortest distances between vertices of adjacent protrusions or between lowest portions of adjacent depressions is 50 to 400 nm (stamper has projections and depressions having a periodicity of between 35-400 nm, which would cause projections and depressions on stamped face of film of the same periodicity, abstract, lines 10-17). JP 2003-043203 does not explicitly disclose that the inclined faces of the protrusions or the depressions has an arithmetic average roughness (Ra) of 100 nm or smaller.

6. U.S. Pat. App. Pub. No. 2002/0117600 to Hosoe discloses the formation of dies for molding antireflection surfaces wherein the molding die has an arithmetic average surface roughness (Ra) of 100 nm or smaller (Hosoe discloses that the surface roughness (Rz) of the molded surface is 2.06 nm, Paragraph [0034] Rz corresponds to the 10-point average roughness, which is the average of the difference between the 5 highest and 5 lowest points in a sample of material. Ra is the integral of the absolute difference between a surface height and the mean surface height of a surface divided by the length. While there is not an exact correlation between the two values, Rz is almost always higher than Ra, because the points on the surface curve near the mean pull Ra down, where Rz only takes values for points far from the mean line into

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account. Thus, it is expected that the Ra of a surface would not be in excess of 45 times the value of Rz, and the mold of Hosoe would have an Ra less than 100 nm).

7. It would have been obvious to one of ordinary skill in the art to use the low roughness mold die of Hosoe to form the projections and depressions on the antireflection film of the JP 2003-043203, leading to an antireflection surface wherein the inclined faces of the protrusions or the depressions would have had an arithmetic average roughness (Ra) of 100 nm or smaller. One of ordinary skill in the art would have been motivated to do so because Hosoe teaches that having a higher roughness can lead to decreased contrast and clarity and a decreased signal to noise ratio of an image projected through the anti-reflection film (paragraph [0007], lines 21-30).

8. Because all of the common technical features between Groups I and II are rendered obvious by the prior art, there is no special technical feature under PCT Rule 13.2. As a result, the claims corresponding to Groups I and II lack unity of invention.

9. A telephone call was made to Applicants' representative, Marc Weiner, on May 13, 2009 to request an oral election to the above restriction requirement, but did not result in an election being made.

10. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

11. The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

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12. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

13. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

14. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained.

Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double

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patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

CONCLUSION

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN E. COMSTOCK whose telephone number is (571) 270-1133. The examiner can normally be reached on Monday through Thursday, 8am-5pm Eastern Standard Time.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael LaVilla can be reached on (571) 272-1539. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N.E.C./
Nathan E. Comstock
Patent Examiner, Art Unit 4132
13 May 2009

**/Michael La Villa/
Michael La Villa
Supervisory Patent Examiner, Art
Unit 4132
14 May 2009**